

Application No. 10/824,950  
Amendment Dated January 26, 2006  
Reply to Office Action of November 9, 2005

**REMARKS**

The Office Action mailed November 9, 2005 has been carefully been considered by Applicant. Reconsideration respectfully requested in view of the foregoing claim amendments and the remarks that follow.

**New Power of Attorney**

On July 27, 2004, Applicant submitted a Declaration and Power of Attorney requesting that the Office direct all communications in or pertaining to this application to the attorneys listed under Customer Number 26753. On September 16, 2005 Applicant submitted a Revocation of Power of Attorney with new Power of Attorney and Change of Correspondence Address appointing practitioners associated the Customer Number 26753 Power of Attorney for the present application. Copies of the respective submissions are attached to this paper.

Subsequently, on November 9, 2005, the U.S. Patent Office mailed the outstanding Office Action to prior attorney of record and disregarded the aforementioned submissions for change in Power of Attorney. Applicant respectfully requests that the Office recognize the request for change of Power of Attorney and address all future correspondence to the attorneys listed under Customer Number 26753.

**Claim Rejections**

Claims 1-3 and 20 have been rejected under 35 U.S.C. §102(b) as being anticipated by Anderson et al. U.S. Patent No. 4,136,690. Claims 1, 4-5, 8 and 20 have been rejected under 35 U.S.C. §102(e) as being anticipated by Burnes U.S. Patent Publication No. 2004/0220635. Claims 6 and 7 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson et al. '690. Claims 9 and 18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson et al. '690 in view of Kaplan et al. U.S. Patent No. 4,732,157. Claims 10 and 11 have been rejected under 35 U.S.C. §103(a)

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as being unpatentable over Anderson et al. '690 in view of Verrier et al. U.S. Patent No. 5,265,617. Claims 12 and 14-16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson et al. '690 in view of Ralph et al. "Blunted Arterial Beroreflec Causes Pathological Heart Rate Turbulence". Claim 13 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson et al. '690 in view of Ralph et al. and Verrier et al. '370. Claim 17 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson et al. '690 in view of Ralph et al. and Burnes. Claim 19 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Anderson et al. '690 in view of Kaplan et al. '157 and Verrier et al. '617.

By the present amendment, claim 20 is cancelled, thus rendering the rejections regarding this claim moot.

The remaining claims are amended to more particularly point out and distinctly claim the subject matter of the present invention and render the same allowable over the applied references.

*Independent Claims 1 and 18*

Independent claims 1 and 18 have been amended to positively recite the step of "assessing the patient's cardiac vulnerability to sudden cardiac death by" several prescribed method steps. As stated by the Examiner in the Office Action, the prior art including Anderson et al. '690 and Burnes fails to teach or suggest such a method.

According to the present invention, Applicant has identified a unique method for predicting sudden cardiac death. Conventional analysis focuses on a single aspect of a patient's electrophysiological system (e.g., repolarization (QT interval variability), depolarization (QRS duration)) or autonomous system (e.g., heart rate variability, heart rate turbulence). Conversely, according to a primary embodiment of the present invention, a relationship is defined between depolarization and repolarization, a first value is determined representative of the relationship for a first beat of an

electrocardiogram signal, a second value is determined representative of the relationship for a second beat of the electrocardiogram signal, and variation between the first value and second value is analyzed to assess the patient's cardiac vulnerability to sudden cardiac death. The claimed method is neither taught nor suggested by the prior art, including the references cited by the Examiner in the outstanding Office Action.

Anderson et al. '690 relates to vector analysis of ECG arrhythmias. Anderson et al. does not teach or suggest the claimed method including the step of assessing a patient's cardiac vulnerability to sudden cardiac death.

Burns relates to a system and method for monitoring electrical dispersion of the heart by including an implantable medical device and associated electrodes system for sensing cardiac signals. Burns also fails to teach or suggest the claimed method including the step of assessing the patient's cardiac vulnerability to sudden cardiac death.

Kaplan et al. '157 merely relates to an apparatus and method for quantifying variability in physiological wave forms, but does not teach or suggest the method of the present invention, including the step of assessing a patient's cardiac vulnerability to sudden cardiac death.

Verrier et al. '617 also fails to relate to the claimed method including the step of assessing the patient's vulnerability to sudden cardiac death.

Ralph et al. also fails to teach or suggest the claimed method.

Claims 2-17 and 19

Claims 2-17 depend directly or indirectly from claim 1 and claim 19 depends from claim 18. Therefore, these claims are believed allowable for the reasons stated above, as well as the detailed subjected matter recited therein.

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Conclusion

The present application is thus believed in a condition for allowance. Such action is respectfully requested.

Respectfully submitted,  
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